



PCT

RAW SEQUENCE LISTING

DATE: 07/08/2004

PATENT APPLICATION: US/10/500,586

TIME: 16:27:07

Input Set : A:\280277 Sequence Listings.txt

Output Set: N:\CRF4\07082004\J500586.raw

HSP

1 <110> APPLICANT: KIM, Bum-Joon

2 BIOMEDLAB CORPORATION

4 <120> TITLE OF INVENTION: PRIMERS FOR AMPLIFYING HSP 65 GENE OF MYCOBACTERIAL SPECIES,

5 65 GENE FRAGMENTS AND METHOD OF IDENTIFYING MYCOBACTERIAL SPECIES

6 WITH THE SAME

8 <130> FILE REFERENCE: OPP021096KR

C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/500,586

C--> 10 <141> CURRENT FILING DATE: 2004-06-30

10 <150> PRIOR APPLICATION NUMBER: KR 10-2002-0004297

11 <151> PRIOR FILING DATE: 2002-01-24

13 <150> PRIOR APPLICATION NUMBER: KR 10-2002-0011648

14 <151> PRIOR FILING DATE: 2002-03-05

16 <160> NUMBER OF SEQ ID NOS: 56

18 <170> SOFTWARE: KopatentIn 1.71

20 <210> SEQ ID NO: 1

21 <211> LENGTH: 604

22 <212> TYPE: DNA

23 <213> ORGANISM: Mycobacterium abscessus

25 <400> SEQUENCE: 1

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28	cgacgtcgcg ggtgacggca ccaccaccgc caccgtgctc gcccaggctc tgggtcaagga	120
30	aggtctgcgt aacgtcgccg ccggcgccaa cccgctcggc ctgaagcgcg gtatcgagaa	180
32	ggccgtcgag aaggtcaccg agacgtgct gaagagcgcc aaggaggctc agaccaagga	240
34	gcagatcgcg gccacggccg gtatctccgc gggcgaccag tccatcggcg acctgatcgc	300
36	cgaggccatg gacaaggttg gtaacgaggg tgcatcacc gtcgaggagt ccaacacctt	360
38	cggcctgcag ctggagctca ccgaggggtat gcgcttcgac aagggtctaca tctcgggcta	420
40	cttcgtgacc gacgccgagc gtcaggaagc cgtcctggag gatccctaca tcctgctggt	480
42	cagctccaag gtgtcgaccg tcaaggatct gcttccggtg ctggagaagg tcattcaggc	540
44	cggcaagccg ctgctgatca tcgccgagga cgtcgagggc gaggtctctt ccactctggt	600
46	cgtc	604

49 <210> SEQ ID NO: 2

50 <211> LENGTH: 604

51 <212> TYPE: DNA

52 <213> ORGANISM: Mycobacterium africanum

54 <400> SEQUENCE: 2

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57	tgacgtcgcc ggtgacggca ccacgacggc caccgtgctg gcccaggcgt tgggttcgca	120
59	ggcctgcgc aacgtcgccg ccggcgccaa cccgctcggt ctcaaacgcg gcatcgaaaa	180
61	ggccgtggag aaggtcaccg agaccctgct caaggcgcc aaggaggctc agaccaagga	240
63	gcagattgcg gccaccgcag cgatttcggc ggggtgaccag tccatcggtg acctgatcgc	300
65	cgaggcgatg gacaaggttg gcaacgaggg cgtcatcacc gtcgaggagt ccaacacctt	360
67	tgggctgcag ctcgagctca ccgaggggtat gcggttcgac aagggtctaca tctcggggta	420
69	cttcgtgacc gacccggagc gtcaggaggc ggtcctggag gaccctaca tcctgctggt	480

ENTERED

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71 cagctccaag gtgtccactg tcaaggatct gctgccgctg ctcgagaagg tcatcggagc      540
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75 cgtc                                                                    604
78 <210> SEQ ID NO: 3
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80 <212> TYPE: DNA
81 <213> ORGANISM: Mycobacterium asiaticum
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86 cgacgtggcc ggtgacggca ccacgacggc caccgtgctg gcacaggcgc tgggtcaagga      120
88 gggcctgcgc aacgttgccg caggcgccaa cccgctgggc ctgaagcgcg gcatcgagaa      180
90 ggccgtcgag aaggtcaccg agaccctgct cagctcgggc aaggacgtcg agaccaagga      240
92 gcagatcgcg gccaccgcgg gtatttcgcg gggcgaccag tcgacggcg acctgatcgc      300
94 cgaggcgatg gacaaagtgc gcaacgaggg tgtcatcacc gtcgaggagt ccaacacctt      360
96 cggcctgcag ctcgagctca ccgagggcat gcggttcgac aagggttaca tctcgggcta      420
98 cttcgtcacc gacgcgcgagc gtcaggaagc cgtcctggag gaccctaca tctgctggt      480
100 ttccagcaag gtgtcgaccg tcaaggacct gctgccgctg ctggagaagg tcatccaggc      540
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104 cgtc                                                                    604
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108 <211> LENGTH: 604
109 <212> TYPE: DNA
110 <213> ORGANISM: Mycobacterium aichiense
112 <400> SEQUENCE: 4
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117 aggtctgcgc aacgtcgctg ccggcgccaa cccgctcggc ctgaagcgcg gcatcgagaa      180
119 ggccgtcgag aagatcaccg agacgtcctt caagagcgcg aaggaggctg agaccaagga      240
121 ccagatcgcg gccaccgcgg ggatctccgc gggcgaccag accatcggtg acctgatcgc      300
123 cgaggccatg gacaaggctg gcaacgaggg tgtcatcacc gtcgaggagt cgaacacctt      360
125 cggcctgcag ctcgagctca ccgaggggat gcgcttcgac aagggttaca tctcgggta      420
127 cttcgtgacc gacgcgcgagc gtcaggaagc ggtcctcgag gatccgtaca tctgctggt      480
129 gtcgtcgaag gtctcgaccg tcaaggacct gcttcccttg ctggagaagg tcattcagtc      540
131 gggcaagccg ctgctgatca tcgccgagga cgtcgagggc gaagccctgt ccaccctggt      600
133 ggtc                                                                    604
136 <210> SEQ ID NO: 5
137 <211> LENGTH: 604
138 <212> TYPE: DNA
139 <213> ORGANISM: Mycobacterium avium
141 <400> SEQUENCE: 5
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144 cgacgtcgcc ggtgacggca cgacgacggc cagggtgctc gccaggcgt tgggtccgca      120
146 gggcctgcgc aacgtcgcgg ccggcgccaa cccgctgggt ctcaagcgcg gcatcgagaa      180
148 ggccgtcgag aaggtcaccg agaccctgct caagtcggcc aaggaggctg agaccaagga      240
150 ccagatcgct gccaccgcgg ccatctccgc gggcgaccag tcgacggcg acctgatcgc      300
152 cgaggcgatg gacaaggctg gcaacgaggg cgtcatcacc gtcgaggagt ccaacacctt      360
154 cggcctgcag ctcgagctca ccgaggggat gcggttcgac aagggttaca tctcgggcta      420
156 cttcgtcacc gacgcgcgagc gtcaggaagc cgtcctcgag gatccgttca tctgctggt      480
158 cagctccaag gtctcgaccg tcaaggacct gctgccgctg ctggagaagg tcatccaggc      540

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162 cgtc                                                                    604
165 <210> SEQ ID NO: 6
166 <211> LENGTH: 604
167 <212> TYPE: DNA
168 <213> ORGANISM: Mycobacterium bovis
170 <400> SEQUENCE: 6
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173 tgacgtcgcc ggtgacggca ccacgacggc caccgtgctg gcccaggcgt tggttcgcg      120
175 gggcctgcmc aacgtcgcmc ccggcgccaa cccgctcggt ctcaaaccgc gcatcgaaaa      180
177 ggccgtggag aaggtcaccg agaccctgct caagggcgcc aaggaggctc agaccaagga      240
179 gcagattgcm gccaccgcag cgatttcggc gggtgaccag tccatcggtg acctgatcmc      300
181 cgaggcgatg gacaagggtg gcaacgaggg cgtcatcacc gtcgaggagt ccaacacctt      360
183 tgggctgcag ctcgagctca ccgaggggat gcggttcgac aagggtctaca tctcggggta      420
185 ctctgtgacc gacccggagc gtcaggaggg ggtcctggag gacctctaca tctgctggt      480
187 cagctccaag gtgtccactg tcaaggatct gtcgccgctg ctcgagaagg tcatcgagc      540
189 cggtaagccg ctgctgatca tcgccgagga cgtcgagggc gaggcgctgt ccaccctggt      600
191 cgtc                                                                    604
194 <210> SEQ ID NO: 7
195 <211> LENGTH: 604
196 <212> TYPE: DNA
197 <213> ORGANISM: Mycobacterium bovis BCG
199 <400> SEQUENCE: 7
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204 gggcctgcmc aacgtcgcmc ccggcgccaa cccgctcggt ctcaaaccgc gcatcgaaaa      180
206 ggccgtggag aaggtcaccg agaccctgct caagggcgcc aaggaggctc agaccaagga      240
208 gcagattgcm gccaccgcag cgatttcggc gggtgaccag tccatcggtg acctgatcmc      300
210 cgaggcgatg gacaagggtg gcaacgaggg cgtcatcacc gtcgaggagt ccaacacctt      360
212 tgggctgcag ctcgagctca ccgaggggat gcggttcgac aagggtctaca tctcggggta      420
214 ctctgtgacc gacccggagc gtcaggaggg ggtcctggag gacctctaca tctgctggt      480
216 cagctccaag gtgtccactg tcaaggatct gtcgccgctg ctcgagaagg tcatcgagc      540
218 cggtaagccg ctgctgatca tcgccgagga cgtcgagggc gaggcgctgt ccaccctggt      600
220 cgtc                                                                    604
223 <210> SEQ ID NO: 8
224 <211> LENGTH: 604
225 <212> TYPE: DNA
226 <213> ORGANISM: Mycobacterium celatum Type 1
228 <400> SEQUENCE: 8
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231 cgacgtcgcc ggtgacggta cgacgacggc caccgtgctg gcccaggcgc tggtaagga      120
233 gggcctgcmc aacgtcgcmc ccggcgccaa cccgctcggt ctgaagcgcg gcatcgagaa      180
235 ggccgtcgag aaggtcaccg agacgtgct caagggcgcc aaggaggctc agaccaagga      240
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239 cgaggccatg gacaagggtc gcaacgaggg cgtcatcacc gtcgaggagt ccaacacctt      360
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243 ctctgtcacc gacccggagc gtcaggaggg ggtgctcgag gagccgtaca tctgctggt      480
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247 cggcaagccg ctgctgatca tcgccgagga cgtcgagggc gaagccctct ccaccctggt      600

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252 <210> SEQ ID NO: 9
253 <211> LENGTH: 604
254 <212> TYPE: DNA
255 <213> ORGANISM: Mycobaterium celatum TypeII
257 <400> SEQUENCE: 9
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262 aggcctgcgc aacgtcgccg ccggtgccaa cccgctcggc ctgaagcgcg gtatcgagaa 180
264 ggccgtcgag aaggtcaccg agacgtgct caagggcgcc aaggaggctg agaccaagga 240
266 gcagatcgct gccaccgcgg ccattctcgc cggtgaccag tcgacggcg acctgatcgc 300
268 cgaggcgatg gacaaggctg gcaacgaggg cgtcatcacc gtcgaggagt ccaacacctt 360
270 cggcctgcag ctcgagctca ccgaggggat gcgcttcgac aagggtctaca tctcggttta 420
272 ctctcgtacc gacgccgagc gtcaggaggg ggtgctcgag gagccctaca tctgctggt 480
274 cagctccaag gtgtcgacgg tcaaggatct gctgccgctg ctggagaagg tcatccaggc 540
276 cggcaagccg ctgctgatca tcgccgagga cgtcgagggg gaggcgttga gcaccctggt 600
278 cgtc 604
281 <210> SEQ ID NO: 10
282 <211> LENGTH: 604
283 <212> TYPE: DNA
284 <213> ORGANISM: Mycobacterium chelonae
286 <400> SEQUENCE: 10
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291 aggtctgcgt aacgtcgctg ccggcgccaa cccgctcggc ctgaagcgcg gcatcgagaa 180
293 ggccgtggag gccgtcacca gctctctgct ggactccgcc aaggagatcg acaccaagga 240
295 gcagatcgcg gccaccgcgg gcatctcgcg gggtgaccag tccatcggtg atctgatcgc 300
297 cgaggccatg gacaaggctg gcaacgaggg tgtcatcacc gtcgaggagt ccaacacctt 360
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307 cgtc 604
310 <210> SEQ ID NO: 11
311 <211> LENGTH: 604
312 <212> TYPE: DNA
313 <213> ORGANISM: Mycobacterium chitae
315 <400> SEQUENCE: 11
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320 aggtctgcgc aacgtcgcgg ccggcgccaa cccgctcggc ctgaagcgcg gcatcgagaa 180
322 ggccgtcgag accgtctcgg agaacctgct caagtcggcc aaggaggctg agaccaagga 240
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336 ggtc 604

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340 <211> LENGTH: 604
341 <212> TYPE: DNA
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349 gggcctgcgc aacgtcgcgg ccggcgccaa cccgctcggg ctcaaacgcg gcatcgaaaa      180
351 ggccgtggag aagggtaccg agacctgct caaggcgcc aaggaggtcg agaccaagga      240
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363 cggtaagccg ctgctgatca tcgccgagga cgtcgagggc gaggcgctgt ccacctggt      600
365 cgtc      604
368 <210> SEQ ID NO: 13
369 <211> LENGTH: 604
370 <212> TYPE: DNA
371 <213> ORGANISM: Mycobaterium flavescens
373 <400> SEQUENCE: 13
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400 <213> ORGANISM: Mycobaterium fortuitum 6841
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415 cggcctgcag ctggagctca ccgggggat gcgcttcgac aagggtaca tctcgggta      420
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423 ggtc      604
426 <210> SEQ ID NO: 15

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L:10 M:270 C: Current Application Number differs, Replaced Current Application No

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date